

Knowledge Of Students Toward Breast Cancer And Breast Self-Examination Practice At High School Nursing In Basra City

معارف الطالبات حول سرطان الثدي وممارسة الفحص الذاتي للثدي في إعدادية التمريض في مدينة البصرة

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الخلاصة

الخلفية: يعتبر سرطان الثدي من الامراض التي تهدد الحياة والتي قد تؤثر على شعور المرأة باحترام وحب ذاتها وشعورها بأنوثتها. ويعتبر سرطان الثدي عالميا من أكثر السرطانات شيوعا بين النساء. ان ممارسة الفحص الذاتي للثدي تجعل المرأة اكثر معرفة ووعيا بثديها وبالتالي قد يساهم ذلك في التشخيص المبكر لسرطان الثدي.

الاهداف: تهدف الدراسة الى قياس معارف طالبات اعدادية التمريض حول عوامل الخطورة والاعراض المبكرة لسرطان الثدي. وتحديد معارف الطالبات حول الفحص الذاتي للثدي. وقياس نسبة ممارسة الطالبات للفحص الذاتي للثدي.

الطريقة: أجريت الدراسة المقطعية العرضية في إعدادية التمريض في مدينة البصرة خلال شهر كانون اول من عام ٢٠١٢ وشملت ٢١٠ طالبة، باستخدام استمارات استبيان تملئ من قبل الطالبات و تتضمن هذه الاستمارات اسئلة تتعلق بالحالة الاجتماعية للطالبات ، وبالعوامل الخطورة و أعراض سرطان الثدي ، وكذلك أسئلة تتعلق بمعارف الطالبات حول الفحص الذاتي وممارسة الفحص الذاتي للثدي. تم استخدام برنامج SPSS لتحليل النتائج. تم تحليل النتائج باستخدام الوسائل الاحصائية (النسب المئوية والتكرار) والوسائل الاستنتاجية (الوسط والانحراف المعياري ومربع كاي

النتائج: كانت معارف اكثر من نصف الطالبات ضعيفة فيما يتعلق بعوامل الخطورة واعراض سرطان الثدي. كانت لدى (15.7%) فقط من الطالبات معارف جيدة ، وذكرت (79.5%) من الطالبات ان التعرض للشعاع هو من اكثر عوامل الخطورة لسرطان الثدي يليه وجود تاريخ إصابة في العائلة بسرطان الثدي (76.7%). معارف الطالبات حول الفحص الذاتي للثدي كانت محدودة وكان المصدر الرئيس للمعلومات هو وسائل الإعلام كما ذكر من قبل (36.3%) من الطالبات، (32.9%) من الطالبات ذكرن ان الفحص الذاتي للثدي يجب ان يكون شهريا و (55.2%) منهن يعرفن الطريقة الصحيحة للفحص. وفيما يتعلق بممارسة الفحص الذاتي للثدي كانت (14.8%) من الطالبات يمارسن الفحص الذاتي للثدي شهريا وبصورة منتظمة. أكثر أسباب عدم ممارسة الفحص الذاتي للثدي والتي ذكرت من قبل (31.4%) من المشاركات هو عدم المعرفة بكيفية الفحص يليها عدم وجود اعراض مرضية (29.9%). وكانت العلاقة مؤثرة بين ممارسة الفحص الذاتي للثدي و كل من مستوى المعرفة بسرطان الثدي والمعرفة بطريقة الفحص.

الاستنتاجات: كانت معرف الطالبات ضعيفة فيما يتعلق بسرطان الثدي وعوامل الخطورة المتعلقة به و لم يكن الفحص الذاتي للثدي مألوفاً جدا بالنسبة للطالبات.

التوصيات: ١. تنظيم حلقة دراسية وبرنامج تدريبي عملي للطالبات يتعلق بسرطان الثدي والفحص الذاتي للثدي ضمن المنهج الدراسي لزيادة معلوماتهم حول سرطان الثدي والفحص الذاتي للثدي. ٢. جدولة الزيارات للطالبات وبرفقة الكادر التدريسي إلى مركز الفحص الذاتي للثدي في المحافظة لغرض اثناء معلوماتهم وزيادة مهارتهن في فحص الثدي وتشجيعهن على ممارسة الفحص الذاتي للثدي.

Abstract

Background: Breast cancer is a life threatening disease that can affect women's sense of self-esteem, her sexuality. Globally, breast cancer is the most common cancer among women. Breast self-examination (BSE) makes women more "breast aware", which in turn may lead to an earlier diagnosis of breast cancer.

Objectives: The study aims to assess the knowledge of students at the high nursing school about the risk factors and early symptoms for breast cancer. To identify the students' knowledge about Breast Self- Examination. And to assess the practice of students for BSE.

Methodology: A descriptive cross-sectional study, conducted at the high school of nursing in Basra city during December 2012. The study sample included 210 students. Self-administered questionnaire was used to gather information about socio-demographic characteristics, knowledge of students about risk factors and symptoms of breast cancer, breast self-examination knowledge, and BSE practice.

Results: More than half of the students had were a poor knowledge about breast cancer risk factors and presentations, only (15.7%) had a good knowledge. It was reported (79.5%) of them she know that the exposure to radiation is a main risk factor. While (76.7%) of the sample agree that family history one of the reasons for breast cancer. In addition (67.6 %) of the sample did not agree that breast cancer can happen with women who never breastfed a child.

High school of nursing students had insufficient knowledge about breast self-examination and the main source of information was the media as reported by (36.3%) of the students, (32.9%) of the students mentioned that breast self-examination should be practiced monthly, (55.2%) of them knew the right way to carry out breast self-examination. Regarding BSE practice (14.8%) of students reported that they had performed breast self-examination monthly. The most common reason for not doing breast self- examination was (not knowing how to perform it) as reported by (31.4%) of the participants followed by having no symptoms (29.9%). There was a significant relation between breast self-examination practice and knowledge about breast cancer and knowledge about breast self- examination.

Conclusions: Nursing students have poor knowledge of breast cancer and its associated risk factors. Students were not also so familiar with practicing BSE.

Recommendations: 1- Construct course teaching and practical program for the students in course curriculum to increase their knowledge about breast cancer, and BSE.

2- Schedule visiting to BSE center for the students and their teachers to increase their knowledge and skills in examination of the breast and to encourage them for practicing BSE

Key Words: Nursing students, knowledge, practices, breast cancer, breast self-examination.

INTRODUCTION

Breast cancer is a life threatening disease that can affect women's sense of self-esteem, her sexuality [1]. Globally, breast cancer is the most common cancer among women, comprising 23% of the 1.1 million female cancers that are newly diagnosed each year [2]. In Iraq, breast cancer ranks the first among the commonest malignancies among all the population and accounts for approximately one-third of the registered female cancers according to the latest Iraqi Cancer Registry, which shows a trend for the disease to affect younger women [3].

It was the basis of the Iraqi national program for early detection of breast cancer, which was initiated in 2001 in an attempt to downstage this disease at the time of presentation. Since then specialized centers and clinics for early detection of breast tumors have been established in the major hospitals in all provinces [4]. Early diagnosis of has a positive effect on the prognosis as well as limits the development of complications and disability. Furthermore, it increases life quality and survival [5].

Breast cancer is easier to treat if early diagnosed. For that reason, some experts recommend that women age over 20 years perform a monthly breast self examination(BSE) to look for new lumps and other changes[6].

BSE considered a simple, inexpensive, noninvasive, and non-hazardous intervention, which is not only acceptable, cost-effective and appropriate. Its purpose is to make women familiar with both the appearance and the feel of their breasts and to help them to detect any changes in their breasts as early as possible [7,8]. Practicing BSE as a screening method is thought to help in early detection of breast cancer; therefore, increasing women's awareness for the importance of BSE [9].

Many studies have shown that nurses have positive influence on women's breast cancer knowledge and BSE practice. Women who were advised about BSE by health care providers demonstrated greater knowledge, confidence and were likely to practice it routinely [10]. The nurses can play an important role in educating women through specially designed educational program in the clinical setting, as well as through community outreach strategies [11]. Due to their frequent contact with patients and their relatives, nurses particularly are often looked upon to provide information and support regarding medical problems, including cancer. This extends not just to patients but also to their own circle of family and friends [12].

Objectives: The study aims to

- 1- Assess the knowledge of students at the high nursing school about the risk factors and early symptoms for breast cancer.
- 2- Identify the students' knowledge about Breast Self- Examination.
- 3- Assess the practice of students for BSE.

METHODOLOGY

A cross-sectional involving all students in the fifth (pre-final year) and six (final year) in the high school of nursing in Basrah, who all agreed to participate in the study and filled in the questionnaires completely (n=210). Approval was obtained from the director of the high school of nursing. The study was conducted during December 2012.

Each participant was given a self-administered questionnaire, The questionnaire included 36 questions ,3 about the demographic characteristics of the respondents; 20 cover the aspect of risk factors and symptoms of breast cancer and 5 for cancer detection. In addition to 11 questions regarding BSE knowledge and practice.

The breast cancer knowledge index was calculated for each student by summing the number of correct answers then dividing by the total scores of the related questions then multiplied by 100. The mean index for all students was calculated, and a cut-off point of 50% was chosen. Poor knowledge level was considered if the correct answers were below the cut-off point. Fair knowledge level was considered if the correct answers were from (50% - 69 %) and good knowledge level was considered if the correct answers were from 70% and over.

Data were analyzed through the use of descriptive data analysis (frequency and percentage) and the inferential, mean, Standard deviation and Chi-squared test was used to examine the association between the groups and a probability of less than 0.05 was considered to be significant

RESULTS

Table 1: Socio- demographic characteristics of the participants

Variable		No.	%
Age	17-20 year	137	65.2
	21-24year	73	34.8
Marital status	Single	197	93.8
	Married	13	6.2
Family history of cancer	No	193	91.9
	Yes	17	8.1
Total		210	100

Table 1 shows that age of the respondents in present study were ranged from 17 to 24 years old with mean and Standard deviation (20 ± 2), (93.8%)were single, (8.1%) have family history of breast cancer.

Table 2: Respondent Knowledge about Risk Factors for Breast Cancer

Risk Factors for Breast Cancer	No.	%
Exposure radiation	167	79.5
Family history of breast cancer	161	76.7
Never breastfed a child	142	67.6
Aging	141	67.1
Tobacco smoking	141	67.1
Recent oral contraceptive use	105	50
Obesity	104	49.5
Hormone therapy for menopause	85	40.5
Lack of physical activity	77	36.7
High fat diet	69	32.9
Late menopause(> 55 years)	60	28.6
Early menarche (< 12 years)	60	28.6
Null parity	57	27.1

Table 2 presented the knowledge of students about risk factors for breast cancer there were shows that (79.5%) of them she know that the exposure to radiation is a main risk factor.

While (76.7%) of the sample agree that family history one of the reasons for breast cancer. In addition (67.6 %) of the sample did not agree that breast cancer can happen with women who never breastfed a child.

Table 3: Respondent Knowledge about Symptoms

Symptoms	No.	%
A palpable swelling in underarm area	187	89
A change in the size or shape of the breast	174	82.9
A swelling or thickening in or near the breast	146	69.5
Nipples look swollen, red or scaly	120	57.1
Bloody discharge from the nipple	102	48.6
The skin of the breast look like the skin of an orange	97	46.2
Nipple retraction	73	34.8

Table 3 shows that the main signs of breast cancer as reported by the students were swelling in the underarm area (89%) and a change in size and shape of breast were (82.9%).

Table 4: Participant Knowledge about Incident and Detection of Breast Cancer

Variables		No.	%
Is it common in our country?	Yes	146	69.5
	No	22	10.5
	Don't know	42	20
Can it affect males also?	Yes	40	19
	No	170	81
Can it be detected early?	Yes	171	81.4
	No	29	13.8
	Don't know	10	4.8
Can early detection improve survival chance?	Yes	183	87.1
	No	13	6.2
	Don't know	14	6.7
Are mammography, ultra sound, clinical breast examination, and BSE used for early detection of breast cancer?	Yes	113	53.8
	No	49	23.3
	Don't know	48	22.9

Table (4) shows that (69.5%) knew that breast cancer is more prevalence in our country, only (19%) thought breast cancer can affect males. Majority of the respondents (81.4%) were aware that breast cancer could be detected early. Only (53.8%) knew that mammography, ultrasound, clinical breast examination, and BSE used in early detection of breast cancer.

Table (5) Respondents knowledge about Breast Cancer Score Level

Score level	No.	%
Poor (<50%)	117	55.7
Fair (50-69%)	60	28.6
Good (70% and over)	33	15.7
Total	210	100

Table (5) Shows that more than half of the nursing students were a poor knowledge about breast cancer score level.

Table (6) Respondents knowledge About Breast Self-Examination

Question		No.	%
Have you heard of BSE?	Yes	201	95.7
	No	9	4.3
From which source did you hear about it?	Media	73	36.3
	Health personnel	55	27.4
	School	52	25.9
	More than one source	21	10.4
Who should practice BSE?	Female only	158	78.6
	Both male and female	43	21.4
At what age should BSE started?	< 20 years	34	17.1
	20+ years	102	50.5
	Unknown	65	32.4
How frequent BSE should be practiced?	Daily	19	9.5
	Weekly	62	31
	Monthly	66	32.9
	yearly	35	17.1
	Unknown	19	9.5
What is the proper time for practicing BSE?	Examining breasts at end of the menstrual period	52	25.8
	Any other time	149	74.2
How is BSE performed?	Palpate with palm and minimum of three fingers	111	55.2
	Anyhow	90	44.8
Total		201	100

Table 6 revealed that (95.7%) of the students have heard about breast self-examination, the main source of their information was mass media (36.3 %), (27.4%) heard from health personnel and (25.9%) heard from the school. Breast self-examination should be carried out by both male and female were reported by (21.4%) of the students. (50.5%) of the study sample was believed that the BSE started at age of twenty, (32.9%) of the respondents mentioned that breast self-examination should be practiced monthly, (55.2%) of the students knew the right way to carry out breast self-examination.

Table (7) Practices of the sample of the study for BSE.

Practice of BSE		No.	%
Do you practice BSE?	No	137	65.2
	Irregular	42	20
	Regular every month	31	14.8
Total		210	100
Where do you practice BSE?	In front of mirror	47	64.4
	In the bathroom	22	30.1
	Lying on the bed	4	5.5
Total		73	100
What are the reasons of not doing BSE?	I did not know how to do it	43	31.4
	I have no symptom	41	29.9
	I am afraid of being diagnosed with breast cancer	39	28.5
	I think I should not touch my breast	14	10.2
Total		137	100

Table 7 shows that (14.8%) of the students doing BSE monthly, (64.4%) of them do in front of mirror. Regarding to students not do BSE the results revealed that (31.4%) did not know how to do it, (29.9%) said they have no symptom, (28.5%) afraid of being diagnosed with breast cancer, and (10.2%) do not think they should touch their breasts.

Table 8: Relationship between Socio-demographic Characteristics and BSE Practices

Variables		Yes		No		X ²	P value
		No.	%	No.	%		
Age	17-20 year	46	33.6	91	66.4	0.244	0.621
	21-24 year	27	37	46	63		
Being married	Yes	5	38.5	8	61.5	0.084	0.772
	No	68	34.5	129	65.5		
Family history of breast cancer	Yes	5	29.4	12	70.6	0.233	0.629
	No	68	35.2	125	64.8		

Table 8 shows that age, marital status, and family history of breast cancer showed no significant association with BSE practice.

Table 9: Relationship between knowledge variables and BSE Practices

Variables		Yes		No		X ²	P value
		No.	%	No.	%		
Know the method of BSE	Yes	69	59.5	47	40.5	69.835	0.000
	No	4	4.3	90	95.7		
knowledge score for correct answers about breast cancer	Poor knowledge	33	28.2	84	71.8	6.005	0.05
	Fair knowledge	28	46.7	32	53.3		
	Good knowledge	12	36.4	21	63.6		

The rate of BSE practice was significantly higher among those who knew how to do it, and among those who had fair and good knowledge about breast cancer.

DISCUSSION

Regarding socio-demographic characteristics aspect of the of participants, their age ranged from 17 to 24 years with mean age of 20 years, and most of them were single which was not surprising among students in the final years of high schools. Positive family history of breast cancer was reported 8.1% of the respondents and it was slightly higher than the rates which were reported for nurses in Jordan and for female nursing students in Saudi Arabia [6,8].

In the aspect of breast cancer and BSE knowledge, the most widely known risk factors mentioned by the students were exposure to radiation and family history of breast cancer (79.5% ,76.7%) respectively. This increased awareness for these factors can be attributed to extensive coverage for these risk factors in Iraqi media. In this study, the students knew little about lifestyle changes to correct breast cancer risk factors such as obesity, high fat diet, smoking. The idea that lifestyle changes may modify the risk of developing breast cancer is supported by several lines of evidence. The worldwide trends of increasing overweight and obesity and decreasing physical activity may lead to an increasing incidence of breast cancer unless other means of risk reduction counteract these effects. Thus, adoption of lifestyle changes by individuals and populations may have a large impact on the future incidence of this disease [13,14]. These breast cancer risk factors can be changed with health education.

Majority of the participants (89%) were aware that palpable swelling in underarm area is a signal of the possibility of breast cancer, and about one third of the participants in this study mentioned that nipple retraction could be one of the breast cancer presentations. This is comparable to what was observed in a study from Saudi Arabia where 73% of the nursing student's participants were aware that palpable nodules are signal of the possibility of breast

cancer and 64% of them did not know that a deviated nipple is one of the breast cancer presentations [10].

Breast cancer risk factors and its presentations knowledge among nurses are important, which may help them to provide high-risk women with useful information regarding screening recommendations. In this study, 15.7% of the participants had good knowledge about breast cancer. This observation was also reported in other studies in Iraq [13].

Results showed that 69.5% were aware that breast cancer is the commonest malignancy among the Iraqi population. Majority 87.1% of the study population answered early detection can improve chances of survival, only 53.8% knew that mammography, ultrasound, clinical breast examination and BSE are used for early detection of breast cancer, these results were similar to what Alwan found in her study on a sample of the educated population in Baghdad [13]. The etiology of breast cancer is uncertain and adequate primary prevention is not possible. Thus, early detection measures remain the first priority for national health promotion programmers. These measures include BSE, which is a screening behavior of relevance to women's health [8].

Teaching BSE and issues about breast cancer as early as possible will go a long way to encourage positive behavior towards BSE, create a 'breast-awareness' consciousness and can lead to seeking regular professional breast examination/screenings later in life [15].

The main source of knowledge about breast cancer and BSE in our study was the media; similar findings reported in studies carried out in Yemen and Nigeria [16, 17]. Emphasizing the potential effectiveness of the visual media in modifying health behavior and promoting education among the general population [13].

About one-quarter of the participants in this study learned about BSE from health personnel. Ideally, physicians, health pamphlets, and other information sources should assist in clarifying the actual size of the benefits. Change in perception, however, will require directed efforts in health education [18].

Although the majority of the participants in our study had heard of BSE, the percentage of the students who had appropriate knowledge about time for BSE, frequency and procedure of BSE were low (25.8%,32.9%,55.2%) respectively. These findings were higher than the result of a study involving secondary-school female students in Jeddah, Saudi Arabia that showed only 14.4% and 7.1% respectively knew the correct frequency and timing [19], but lower than the result of a study involving young women in Gordon, revealed that out of 31 nursing student, 67.7% knew the correct methodology of BSE. This indicates that students' knowledge and practice of BSE should be increased during their undergraduate study [9]. In study involving 200 secondary-school female students in Nigeria showed that only half of respondents had good knowledge about breast self examination [20].

Regarding the aspect of practicing BSE, the current study revealed that 14.8% of the participants performed BSE regularly. In other studies, the percentage of monthly BSE have been found to be 32.1% among under graduated students in Nigeria [5], 66% among nursing students in Saudi Arabia [8], 52% among Jordanian nurses, and 38.7% among Jordanian nursing students [9], and 36.7% among selected female university students in Malaysia [21]. Majority of the participants carried BSE out in front of mirror, similar finding was mentioned in other studies in Nigeria [17].

In this study the students' lack of knowledge about how to do BSE and having no symptoms were regarded as the main causes of not practicing BSE, these findings are similar to findings among Malaysian, Women [21]. Lack of knowledge about how to perform BSE among Basrah women might have been due to insufficient education programs for breast health awareness. Breast health awareness provides women with some acknowledgement of the part they can play in being empowered to fight breast disease [19].

There was a significant association between knowledge of BSE and practice. The respondents who had a good knowledge of BSE practice it more than those who did not. This was similar to other studies in Saudi Arabia and Nigeria [10, 20].

CONCLUSIONS

Nursing students have poor knowledge of breast cancer and its associated risk factors. Also Students were not also so familiar with practicing BSE.

RECOMMENDATIONS:

- 1- Construct course teaching and practical program for the students in course curriculum to increase their knowledge about breast cancer, and BSE.
- 2- Schedule visiting to BSE center for the students and their teachers to increase their knowledge and skills in examination of the breast and to encourage them for practicing BSE.

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